a squeezing of the elongated members **540** and **550** together at their respective handle portions **570** and **580** will cause lower jaw member **545** to rotate towards upper jaw member **555**, enabling the pliers to clamp an object. As shown in FIG. **5**, such a design allows for the pliers to be constructed narrower than the pliers of the first embodiment.

The locking mechanism of the second embodiment utilizes the same locking mechanism as was disclosed in the first embodiment with the use of hinged lever **170** in conjunction with arc shaped surface **160** on the bottom portion **155** of one of the elongated members.

From the foregoing detailed description, it will be evident that there are a number of changes, adaptations and modifications of the present invention, which come within the province of those persons having ordinary skill in the art to which the aforementioned invention pertains. However, it is intended that all such variations not departing from the spirit of the invention be considered as within the scope thereof as limited solely by the appended claims. For example, the novel features of this invention could be used in pliers having various other shapes, sizes or having jaws oriented in other directions. Further, this invention could be used in other items and should not be limited to pliers. For example, any tool requiring the squeezing together of a pair of handle members could incorporate this invention to provide a locking mechanism or as a method of adding a extra torque between the handle members.

I claim:

1. A hand tool for gripping an article in locking relation comprising:

a pair of elongated members connected together for pivotal movement about a first axis, each having an opposing jaw portion at an end thereof and a handle portion, said handle portions adapted to be grasped by a hand of the user thereof and said jaw portions cooperable to engage an article therebetween;

one of said handle portions including a segment having an arcuate surface disposed concentric with said first axis; and

a lever member connected to the other of said elongated members for pivotal movement about a second axis having a first end thereof engageable by at least one finger of the user's hand grasping said handle portions when said jaws engage said article therebetween, for angularly displacing said lever member about said second axis and a second end engageable with said arcuate surface,

wherein upon angular displacement of said lever member by said at least one finger of the user's hand following engagement of said article between said jaw portions, said second end is thrust into said arcuate surface preventing movement therebetween and a combination of said angular displacement and said thrust contact increases a gripping pressure between said jaw portions.

2. A hand tool according to claim **1** wherein said first and second axes are parallel.

3. A hand tool according to claim **1** wherein the sum of a radial dimension from said first axis to said second axis and a radial dimension from said second axis to said second end of said lever member is greater than a radial dimension of said first axis to said arcuate surface.

4. A hand tool according to claim **1** wherein said second end of said lever member is displaceable angularly relative to said second axis.

5. A hand tool according to claim **1** wherein said lever member includes a first portion including said first end pivotally connected to said other handle portion and a second portion including said second end, displaceable angularly relative to said second axis, and including means for fixing the position of said second lever portion relative to said first lever portion.

6. A hand tool according to claim **1** wherein said second end of said lever member is rounded.

7. A hand tool according to claim **1** wherein said second end of said lever member projects beyond the handle portion of said other elongated member.

8. A hand tool according to claim **1** wherein the handle portion of said one elongated member includes a laterally projecting segment and said arcuate surface is provided thereon.

9. A hand tool according to claim **8** wherein said handle portion of said other elongated member is shorter than the handle portion of said one elongated member, and said second axis is disposed adjacent a free end of the handle portion of said other elongated member.

10. A hand tool according to claim **1** wherein said elongated members are formed of flat metal stock.

11. A hand tool for gripping an article in locking relation comprising:

a pair of elongated members connected together for pivotal movement about a first axis;

one of said elongated members having a jaw portion, a handle portion and a portion including an arcuate surface disposed concentric with said first axis;

a jaw member connected to said one elongated member for pivotal movement about a second axis, cooperable with said jaw portion of said one elongated member to engage said article therebetween and having a gear sector portion disposed coaxially with said second axis;

the other of said elongated members having a gear sector portion disposed coaxially with said first axis and meshing with said gear sector portion of said jaw member, and a handle portion which may be grasped along with the handle portion of said one elongated member by a hand of a user and drawn together to cause said jaw member to angularly displace relative to said second axis to grip said article disposed between said jaw member and said jaw portion of said one elongated member; and

a lever member connected to said other elongated member for pivotal movement about a third axis having a first end engageable by at least one finger of the user's hand grasping said handle portions when said jaw member and said jaw portion engage said article therebetween, for angularly displacing said lever member about said third axis, and a second end engageable with said arcuate surface,

wherein upon angular displacement of said lever member by said at least one finger of the user's hand following engagement of said article between said jaw member and said jaw portion, said second end is thrust into said arcuate surface preventing movement therebetween and a combination of said angular displacement and said thrust contact increases a gripping pressure between said jaw member and said jaw portion.

12. A hand tool according to claim **11** wherein said axes are parallel.

13. A hand tool according to claim **11** wherein the sum of a radial dimension from said first axis to said third axis and a radial dimension from said third axis to said second end of

said lever member is greater than a radial dimension from said first axis to said arcuate surface.

14. A hand tool according to claim **11** wherein said second end of said lever member is displaceable angularly relative to said third axis.

15. A hand tool according to claim **11** wherein said lever member includes a first portion including said first end, pivotally connected to the handle portion of said other elongated member and a second portion including said second end, displaceable angularly relative to said third axis, and including means for fixing the position of said second lever portion relative to said first lever portion.

16. A hand tool according to claim **11** wherein said second end of said lever member is rounded.

17. A hand tool according to claim **11** wherein said second end of said lever member projects beyond the handle portion of said other elongated member.

18. A hand tool according to claim **11** wherein the handle portion of said one elongated member includes a laterally projecting segment and said arcuate surface is provided on said segment.

19. A hand tool according to claim **18** wherein said handle portion of said other elongated member is shorter than the handle portion of said one elongated member, and said third axis is disposed adjacent a free end of the handle portion of said other elongated member.

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